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12 September 2024

Ms Rachel Thomas
Project Leader
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Dear Ms Thomas

Submitted electronically: www.aemc.gov.au

Re: Draft Rule Determination - Integrating Price-Responsive Resources into the NEM

Red Energy and Lumo Energy (Red and Lumo) welcome the opportunity to make this submission to the Australian Energy Market Commission's (the Commission's) draft rule determination for Integrating Price-Responsive Resources into the National Electricity Market.

AEMO's initial rule change proposal sought to increase its visibility of price responsive resources, allowing it to better account for them in its forecasting and market operation functions. However, the willingness of the owners of these resources to actively participate in wholesale and Frequency Control Ancillary Services (FCAS) markets remains highly uncertain at this stage of the energy transition. We support AEMO's efforts to increase visibility. However, we strongly encourage the Commission to avoid rule amendments that significantly distort the market or create different obligations for different market participants. Our preference is for more moderate, incremental and less distortionary reforms until it becomes clear that a significant problem persists and that more substantial change is necessary.

The Commission's draft determination is a reasonable and moderate approach, subject to some amendments and further clarification. More specifically, we support the proposal for unscheduled price responsive resources to be scheduled and centrally dispatched, i.e. the 'dispatch mode'. This will create an effective mechanism for owners and operators of any price responsive resources that are firm and of a large enough scale to generate revenue in wholesale and FCAS markets instead of simply optimising an asset owner's consumption and output behind the meter. This means owners will be better placed to realise the full value of their assets and it would increase competition in these markets for the benefit of all consumers.

However, we strongly emphasise the importance of compliance with dispatch. Furthermore, obligations to comply with dispatch should be enshrined in rules, rather than a guideline. While we acknowledge uncertainty about the rate of takeup and the manner in which price

response resources will want to participate in the wholesale market, AEMO is predicting that up to 40 percent of NEM generation could come from unscheduled price resources by 2050. Lesser obligations for these resources, such as lighter conformance criteria, violates the principle of competitive neutrality but more significantly, has the potential to threaten system security. This, in turn, would impose unnecessary costs on consumers as AEMO would need to procure additional services to account for the uncertainty.

We also welcome the Commission's decision not to proceed with the visibility model at this time. The proposal, as we understand it, would not have improved AEMO's visibility of the scale and impact of price responsive resources in any meaningful way. It did not account for the limitations of retailers to precisely forecast how certain resources might respond to price signals. Nor did it create a strong incentive for any party to propose indicative bids that AEMO could rely on. This issue requires further consideration and our preference is for AEMO to look for less onerous and disruptive measures to improve visibility. One example is greater compliance with the established Distributed Energy Resources Register.

Key issues

Dispatch mode

The proposed dispatch mode will support the integration of price responsive resources and enhance central dispatch efficiency, contributing to a more affordable and reliable energy system. The greater visibility this provides will reduce the need for AEMO to forecast the level of unscheduled price responsive resources and this should reduce demand forecasting errors and associated inefficiencies in dispatch, especially those involving adjustments to FCAS. As such, we support the Commission's proposal.

Key issues that require further consideration by the Commission are i) appropriate conformance criteria, and ii) the instrument through which the rules for market participation by these resources are prescribed.

The Commission notes the suggestion that the Wholesale Demand Response Mechanism (and more specifically, the use of a guideline that outlines requirements for market participation, including conformance criteria) is a potential model for voluntary scheduled resources (VSR). However, the conformance rules for Wholesale Demand Response Units are not appropriate for these resources; they are lighter than those for other scheduled resources and relying on them for VSR would distort the wholesale market.¹

¹ In AEMO's 'WDR - Post Event Dispatch Conformance Policy' the wholesale demand response units are subjected to a separate post event dispatch non compliance analysis for these units that include:

1. There is an interval error of + or – 6 MW before non-conformance is flagged.
2. An error band equivalent to + or – 50% of their dispatch targets across a settlement day is assessed.
3. Three or more instances of non-conformance must be flagged before the unit is declared non-conforming

AEMO forecasts that VSRs will account for an increasingly material share of scheduled resources in the future. It is important that these resources are regulated in a competitively neutral manner, i.e. subject to the same rules as other wholesale and FCAS market participants. As such, AEMO should be able to declare them as non performing if they fail to comply with dispatch instructions, consistent with section 3.8.23 of the Rules.²

AEMO must have confidence that these resources will follow dispatch instructions in the same manner as other scheduled generators. Otherwise, AEMO will need to account for the uncertainty of compliance and potentially procure additional support services or take other actions to maintain system reliability. This generates unnecessary costs.

Consistent bidding rules across all competing market participants help AEMO to verify that these resources honour their bids; this is essential for the integrity of the electricity system. We note the Australian Energy Regulator's Compliance Bulletin No. 1 from July 2016, which remains applicable for today's market:

Failure to accurately represent capability or follow dispatch instructions distorts market forecasts and outcomes and inevitably affects other market participants in the NEM. Non-compliance with dispatch instructions can increase the requirement for frequency control ancillary services at a greater market cost. These are costs that are borne by all registered participants, and therefore ultimately by consumers. Not following dispatch instructions can, over time, also result in an increase in the safety margins used by AEMO and network service providers in determining the technical envelope in which the power system can operate, reducing its utilisation and compromising its operation.

The Commission suggests that a requirement to comply with dispatch could be a barrier to market participation by some VSR. However, we are confident that the current bidding rules are robust and flexible enough to accommodate these resources. They facilitate efficient integration by allowing resources to amend their bids or offer explanations to AEMO if they cannot follow dispatch instructions.

² Section 3.8.23 of the Rules states:

If a scheduled generating unit, scheduled network service or scheduled load fails to respond to a dispatch instruction within a tolerable time and accuracy (as determined in AEMO's reasonable opinion), then the scheduled generating unit, scheduled network service or scheduled load (as the case may be):

(1) is to be declared and identified as non-conforming; and
(2) cannot be used as the basis for setting spot prices.

Moreover, the cost and system security implications of granting some concessions are likely to be significant and will grow over time. Exempting these resources from bidding and dispatch compliance requirements in the Rules would be inconsistent with the increasing obligations imposed on scheduled generation in recent years. We also note that AEMO has previously undertaken Distributed Energy Resources trials where it found that aggregated portfolios of distributed resources are capable of meeting a high standard for dispatch conformance.³ This experience should give the Commission confidence that these resources can comply with dispatch instructions.

Looking ahead, we note the Step Change scenario in AEMO's 2024 *Integrated System Plan* assumes that coordinated CER storage will account for 66 percent of the NEM's energy storage capacity by 2049-2050. We consider it critical for system security that these resources comply with dispatch instructions given their increasing significance in the coming years.

Our strong recommendation is for the Commission to apply conformance criteria for VSR through Rules rather than for AEMO to apply them through a subordinate instrument, such as a guideline. This reflects the importance of compliance with dispatch and the increasing volume of VSR that we will see in the future. The Commission has previously addressed rule changes related to bidding and has relevant experience, making it appropriate for them to determine the criteria for these resources. On the other hand, AEMO's role relates to market operation, rather than to determining the rules for market participation by different types of resources.

Incentive mechanism

While the scale is modest, the Commission's proposal to include a financial incentive for market participation by a specific type of market participant is highly unusual and would create a problematic precedent. We view financial support for VSR as a policy matter for governments to determine, rather than a matter to be prescribed in the Rule. It also appears contrary to the efficiency component of the National Electricity Objectives.

The Commission appears to recognise this point, noting the other mechanisms through which market participants can obtain financial support in the draft determination. We also note the most recent AEMO *Electricity Statement of Opportunities*, which lists the various Federal and jurisdictional policies and programs that are actively funding and supporting new developments and they will include VSR. These programs are:

³ AEMO Scheduled Lite electricity rule change proposal January 2023 - p.66

"Based on performance in DER trials and feedback from traders, AEMO understands that aggregated portfolios of distributed resources are capable of meeting a high standard for dispatch conformance. Further, traders could self-manage their compliance by opting out of Dispatch mode during periods where they are not confident of complying with dispatch targets".

- Federal Capacity Investment Scheme
- New South Wales Electricity Infrastructure Roadmap, and its firming tenders
- Victorian Renewable Energy Target Auction 2
- Queensland Energy and Jobs Plan
- South Australian Hydrogen Jobs Plan.

Visibility mode

We welcome the Commission's decision not to proceed with visibility mode at this time. Neither the AEMO scheduled lite proposal nor the Creative Energy Consulting model directly addressed the problem for AEMO of the visibility of price responsive resources or their potential impact on wholesale and FCAS market outcomes. This is due to the absence of any regulatory requirement for asset owners to comply with indicative bids.

Imposing obligations on retailers or creating financial incentives for them to provide indicative bids does not overcome the fundamental issue. This is because in many instances, these resources are non-firm and a retailer cannot predict their responsiveness to wholesale market outcomes with any certainty. We also had concerns about the complexity of these proposals and their implementation and compliance costs and believe they would not have been justified at this time.

We agree with the Commission's decision to revisit these models in the future when the nature and extent of the problem becomes clearer and as various policy initiatives to drive the energy transition start to take effect. Examples of the latter include the Accelerate Smart Meter Deployment, Unlocking CER Benefits Through Flexible Trading and other initiatives under the Federal Government's CER Roadmap.

We also recommend the Commission and AEMO consider other less distorting strategies and projects to improve visibility of price responsive resources. These include:

- Enforcing stricter compliance with the Distributed Energy Resources Register.
- Updating the Demand Side Participation portal interface
- Options for promoting greater visibility of electric vehicles across the NEM, noting they are potentially one of main enablers of more flexible consumption and generation at the small customer level.

About Red and Lumo

We are 100% Australian owned subsidiaries of Snowy Hydro Limited. Collectively, we retail electricity and gas in New South Wales, Queensland, South Australia, Victoria and the ACT to over 1.4 million customers.

Red and Lumo thank the Commission for the opportunity to comment on the draft rule determination. Should you wish to discuss or have any further enquiries regarding this submission, please call Con Noutso, Regulatory Manager on 0481 013 988.

Yours sincerely

A handwritten signature in black ink, appearing to read "G Hargreaves".

Geoff Hargreaves

Manager - Regulatory Affairs

Red Energy Pty Ltd

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